

REMARKS

This application has been carefully reviewed in light of the Office Action dated May 20, 2004. Claims 1 to 8, 10 to 24 and 49 to 57 are presented for examination, with Claims 25 to 48 having been withdrawn from consideration. Claim 9 has been cancelled, Claims 49 to 57 have been added, and Claims 1 to 3, 5, 7, 8, 10, 11, 13, 15 to 18, 20 and 22 to 24 have been amended. Claims 1, 10, 17 and 24 are in independent form. Reconsideration and further examination are respectfully requested.

Turning first to a formal matter, the Office Action Summary indicates that priority papers have not been received. However, these papers were filed together with a Submission Of Priority Documents dated March 12, 2002, and a review of the USPTO's PAIR page indicates that the priority documents were received. Applicants therefore request that the Examiner acknowledge receipt of these priority papers. If the Examiner does not find these papers in his file, he is requested to contact the undersigned for replacement copies.

In the Office Action, Claims 1 to 24 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,159,597 (Monahan). Claim 9 has been cancelled without prejudice or disclaimer of subject matter and without conceding the correctness of its rejection. Reconsideration and withdrawal of the rejection of the remaining claims are respectfully requested.

The present invention generally concerns controlling a printing device having a plurality of printing functions in accordance with a user's request inputted via a user interface. A part of a plurality of conflict process rules is stored, where the plurality of conflict process rules define conditions for avoiding a conflict between the plurality of printing functions. According to one feature of the invention, a complementary rule is

generated that corresponds to the rest of the plurality of conflict process rules on the basis of the part of the plurality of conflict process rules.

By virtue of the foregoing, in which a complementary rule is generated that corresponds to the rest of the plurality of conflict process rules on the basis of the part of the plurality of conflict process rules, a developer can describe principal rules in advance as a framework.

Referring specifically to the claims, independent Claim 1 as amended is directed to a user interface control apparatus for controlling a printing device having a plurality of printing functions in accordance with a user's request inputted via a user interface. The apparatus includes storage means for storing a part of a plurality of conflict process rules, wherein the plurality of conflict process rules define conditions for avoiding a conflict between the plurality of printing functions. The apparatus also includes complementary rule generation means for generating a complementary rule that corresponds to the rest of the plurality of conflict process rules on the basis of the part of the plurality of conflict process rules stored in the storage means. In addition, the apparatus includes input means for inputting the user's request via the user interface to designate a printing function corresponding to the user's request, and update means for updating a setting state of the printing function of the printing device by applying the part of the plurality of conflict process rules stored in the storage means and the complementary rule generated by the complementary rule generation means in accordance with the user's request inputted by the input means.

Independent Claim 10 as amended is directed a user interface control method for controlling a printing device having a plurality of printing functions in accordance with a user's request inputted via a user interface. The method includes the

complementary rule generation step of referring to a conflict process rule description file that describes a part of a plurality of conflict process rules, wherein the plurality of conflict process rules define conditions for avoiding a conflict between the plurality of printing functions, and generating a complementary rule that corresponds to the rest of the plurality of conflict process rules on the basis of the part of the plurality of conflict process rules. The method also includes the input step of inputting the user's request via the user interface to designate a printing function corresponding to the user's request, and the update step of updating a setting state of the printing function of the printing device by applying the part of the plurality of conflict process rules and the complementary rule in accordance with the user's request inputted in the input step.

In a similar manner, independent Claims 17 and 24 are respectively directed to program and a storage medium.

The applied art is not seen to disclose or to suggest the features of the invention of the subject application. In particular, the Monahan patent is not seen to disclose or suggest at least the feature of generating a complementary rule that corresponds to the rest of the plurality of conflict process rules on the basis of the part of the plurality of conflict process rules.

As understood by Applicants, Monahan discloses an error recovery subsystem which employs a user editable file including the rules for defining the system state, the error states, and the sequences of recovery actions to be taken depending upon the comparison between the system state and the error states. The rules for defining the system state include don't care variables, and the sequences of recovery actions are specified using an index into a set of elemental recovery actions. Because the system state, error state, and sequence of recovery actions are defined in a user editable file, modifications to the error

recovery scheme can be made without recompiling the error recovery subsystem program code. See Monahan, Abstract; column 3, lines 5 to 25.

Although Monahan describes an error recovery system, it is not seen to disclose or suggest controlling a printing device to avoid conflict between a plurality of printing functions. Moreover, Monahan fails to teach generation of a complementary rule. As a consequence, Monahan could not possibly describe generating a complementary rule that corresponds to the rest of the plurality of conflict process rules on the basis of a part of the plurality of conflict process rules. In addition, Monahan does not describe the attendant benefits that such generation of a complementary rule provides.

Accordingly, based on the foregoing amendments and remarks, independent Claims 1, 10, 17 and 24 as amended are believed to be allowable over the applied reference.

The other claims in the application are each dependent from the independent claims and are believed to be allowable over the applied reference for at least the same reasons. Because each dependent claim is deemed to define an additional aspect of the invention, however, the individual consideration of each on its own merits is respectfully requested.

No other matters being raised, it is believed that the entire application is fully in condition for allowance, and such action is courteously solicited.

Applicants' undersigned attorney may be reached in our Costa Mesa,
California office at (714) 540-8700. All correspondence should continue to be directed to
our below-listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael K. O'Neill", written over a horizontal line.

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